



SB 656 Workshop

Measures to Reduce Particulate Matter

May 6, 2004
Sacramento, California

Workshop Outline

- Legislation requirements
- PM standards and attainment status
- Development of lists and their use
 - ARB lists
 - Air district list
- Next steps

SB 656 Requirements

- **By January 1, 2005:** ARB, in consultation with air districts, must develop and adopt a list of measures for reducing PM
- **By July 31, 2005:** ARB and air districts must adopt implementation schedules for appropriate measures
- **By January 1, 2009:** ARB must prepare a report describing actions taken
- **January 1, 2011:** Legislation sunsets, unless renewed

Scope of PM Problem

- PM includes:
 - PM10 and PM2.5
 - Directly emitted and secondary (precursor species NO_x, SO_x, ROG, ammonia)
- Most of California is nonattainment for State PM10 standards and all major urban areas exceed the State PM2.5 standard
- Variations in severity and number of exceedances, seasonality, sources

State and Federal Particulate Matter Standards

	California ($\mu\text{g}/\text{m}^3$)	Federal ($\mu\text{g}/\text{m}^3$)
PM₁₀		
Annual	20	50
24-hour	50	150
PM_{2.5}		
Annual	12	15
24-hour	under review	65

Attainment of California's new standards will annually avoid:

- 2,600 premature deaths
- 7,900 cases of chronic bronchitis in children
- Thousands of cardiovascular and respiratory disease hospitalizations
- 570,000 lost work days

Federal PM10 Designations



■ Nonattainment

4 of these non-attainment areas now meet federal PM10 standards

- Sacramento County
- Mammoth Lakes
- 2 Areas in Searles Valley
- Portion of San Bernardino County

Expected Federal PM_{2.5} Designations



Nonattainment Area	Design Value ($\mu\text{g}/\text{m}^3$)	
	24-hour (Std. is 65)	Annual (Std. is 15.0)
San Joaquin Valley	90	23.2
South Coast	73	28.9
City of Calexico	50	15.6
San Diego	43	16.4

State PM10 Area Designations



State PM2.5 Area Designations



List Preparation

- Most readily available, feasible, cost-effective measures in place as of January 1, 2004
- ARB and air district measure lists
- Measures for directly emitted PM and precursor species

ARB List

- Two part list:
 - Measures adopted through January 1, 2004
 - Future measures and implementation schedule for Board consideration
 - Diesel Risk Reduction Program
 - State and Federal Strategy
- Focus on mobile sources and fuels, consumer products, diesel risk reduction measures

ARB List Categories

- Diesel-fueled Engines and Vehicles
- Smoke Management Program
- Non-Diesel Mobile Sources
- Non-Diesel Fuels
- Consumer Products
- Vapor Recovery
- Distributed Generation

Air District List

- All measures adopted prior to January 1, 2004 eligible
- Screening based on level of stringency
- Focus on stationary and area sources, incentive programs, and fleet rules (where applicable)

Air District List Categories

- Residential Wood Combustion
- Non-Agricultural Open Burning
- Fugitive Dust
- Stationary and Area Sources
 - Combustion
 - Product Manufacturing
 - Coating Operations
 - Leaks and Storage
- Fleet Rules
- Incentive Programs

Use of Air District List

- Select appropriate subset of measures:
 - Based on nature and severity of PM problem
 - Consider cost-effectiveness and feasibility for individual air district
 - Harmonize with ongoing regulatory efforts

Next Steps

- Seeking input on draft lists
- Request comments by May 31, 2004
- Issue staff report and revised lists for Board consideration
- Presentation at July 2004 Board meeting
- Update Statewide PM Characterization

For More Information

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